

Version with markings to show changes made:

-7. A process for embedding supplemental data selected from the group consisting of interactive and traditional advertising, merchandising materials, e-commerce solicitations and messages, polls, video games, interactive music and audio/video programs, and computer programs, into a pre-prepared digital media file, that comprises, transforming the media file into encoded sets of frequency domain coefficient representations of the pre-prepared media file information and compressing the file; selecting predetermined coefficient sets; and embedding at least thousand of bits of the said supplemental digital data at data rates from hundreds to thousands of kilobytes and higher and at -selected multiple coefficients of each set to produce a supplemental data file containing such embedded data for enabling user decoding and playback of both the pre-prepared media file information and the embedded supplemental data, wherein the embedding steps uses the least-significant bit of the selected coefficients and wherein single bits of data are embedded in each of a number of coefficients of each set and by computing the parity of such least-significant bits of a group of said coefficients.

27. A system for embedding supplemental digital data selected from the group consisting of interactive and traditional advertising, merchandising materials, e-commerce solicitations and messages, polls, video games, interactive music and audio/video programs, and computer programs, into a pre-prepared digital media file having, in combination, encoding means for transforming the media

file information into sets of frequency-domain coefficient representations of the pre-prepared media file information and for compressing the file; means for selecting predetermined coefficient sets; and further encoding means for embedding bits of ~~the~~ said supplemental digital data at data rates from hundreds to thousands of kilobytes and higher and at selected multiple ~~coefficients~~ coefficients of each set to produce a supplemental media file containing such embedded data for enabling user decoding and playback on playback apparatus of both the pre-prepared media file information and ~~the~~ said embedded supplemental data, wherein the further encoding means uses the least-significant bit of the selected coefficients, and wherein the further encoding means embeds single bits of data in each of a number of coefficients of each set and -by computing the parity of such least-significant bits of a group of said coefficients.

31. A process for embedding supplemental digital data selected from the group consisting of interactive and traditional advertising, merchandising materials, e-commerce solicitations and messages, polls, video games, interactive music and audio/video programs, and computer programs, into a compressed-digital information stream, that comprises, encoding the compressed digital data stream as a set of coefficient representations of said information; and embedding ~~portions of the~~ at least thousands of bits of said supplemental digital data rates from hundreds to thousands of kilobytes and higher and at selected multiple coefficients of said set to produce a stream containing such embedded data for enabling user decoding to present both said information and the embedded supplemental data.

32. A process for embedding supplemental digital data selected from the group consisting of interactive and traditional advertising, merchandising materials, e-commerce solicitations and messages, polls, video games, interactive music and audio/video programs, and computer programs, into a digital information stream, that comprises, transforming the stream into encoded sets of frequency-domain coefficient representations of said information and compressing the same; selecting predetermined coefficient sets; and embedding thousands of bits of the supplemental digital data at data rates from hundreds to thousands of kilobytes and higher and at selected multiple coefficients of each set to produce a supplemental data file containing such embedded data for enabling user decoding to present both the said information and the embedded supplemental data.--

34. A process for embedding supplemental digital data, into a compressed-digital information stream, that comprises, encoding the compressed digital media file as a set of coefficient representations of the pre-prepared media file information; embedding portions of said supplemental digital data at selected coefficients to produce a media file containing such embedded data for enabling user decoding and playback of both the pre-prepared media file information and the embedded supplemental data, wherein single bits of data are embedded in each of a number of coefficients of each set and by computing the parity of the least significant bits of a group of said coefficients.

35. The process of claim ~~32~~ 34 wherein said computing comprises modifying the parity of groups of a number of coefficients, embedding a bit in each set of coefficients. ~~the parity is modified in groups of eights or more coefficients.--~~

36. The process of claim ~~32~~ 34 wherein watermarking digital data is also applied to the media file, but prior to the embedding of said ~~the encoding is used to encode a bit in each set of coefficients until the supplemental data is completely embedded.~~